

Claims:

1. A method of distributing satellite navigation data, comprising:
 - processing satellite signals at each of a plurality of reference stations to receive a respective plurality of satellite navigation data streams;
 - forming packets in response to said plurality of satellite navigation data streams to generate a plurality of packetized satellite navigation data streams;
 - sending each of said plurality of packetized satellite navigation data streams to a processing system;
 - removing, at said processing system, duplicate packets within said plurality of packetized satellite navigation data streams to generate a combined packet stream; and
 - sending said combined packet stream into a communication network.
2. The method of claim 1, further comprising:
 - decoding satellite navigation data within said combined packet stream to generate satellite data.
3. The method of claim 2, wherein said satellite data comprises at least one of ephemeris data, almanac data, ionosphere data, universal time offset data, satellite health data, and raw data bits.
4. The method of claim 1, wherein said plurality of satellite navigation data streams comprises global positioning system (GPS) satellite navigation messages, and wherein each of said packets includes a sub-frame of said GPS satellite navigation messages.
5. The method of claim 4, wherein each of said packets includes a header having a satellite identifier and a time-of-week (TOW) value.
6. The method of claim 5, wherein each of said duplicate packets is removed in response to said satellite identifier and said TOW value associated therewith.

7. The method of claim 1, wherein said processing system comprises a hub, and the method further comprises:
- receiving said combined packet stream from said communication network at a position location server.
8. The method of claim 7, further comprising:
- decoding satellite navigation data within said combined packet stream to generate satellite data; and
 - storing said satellite data in a cache disposed within said position location server.
9. The method of claim 7, further comprising:
- receiving, at said position location server, at least one additional packetized satellite navigation data stream;
 - removing duplicate packets within said combined packet stream and said at least one additional packetized satellite navigation data stream to generate another combined packet stream;
 - decoding satellite navigation data within said other combined packet stream to generate satellite data; and
 - storing said satellite data in a cache disposed within said position location server.
10. The method of claim 9, wherein said at least one additional packetized satellite navigation data stream is generated by at least one of an additional hub and a reference station disposed proximate to said position location server.
11. A system for distributing satellite navigation data, comprising:
- a plurality of reference stations for processing satellite signals to receive a respective plurality of satellite navigation data streams and forming packets in response to said plurality of satellite navigation data streams to generate a plurality of packetized satellite navigation data streams; and
 - a processing system for receiving each of said plurality of packetized satellite navigation data streams, removing duplicate packets within said

plurality of packetized satellite navigation data streams to generate a combined packet stream, and sending said combined packet stream into a communication network.

12. The system of claim 11, wherein said processing system includes a processor for decoding satellite navigation data within said combined packet stream to generate satellite data.

13. The system of claim 12, wherein said satellite data comprises at least one of ephemeris data, almanac data, ionosphere data, universal time offset data, satellite health data, and raw data bits.

14. The system of claim 11, wherein said plurality of satellite navigation data streams comprises global positioning system (GPS) satellite navigation messages, and wherein each of said packets includes a sub-frame of said GPS satellite navigation messages.

15. The system of claim 14, wherein each of said packets includes a header having a satellite identifier and a time-of-week (TOW) value.

16. The system of claim 15, wherein each of said duplicate packets is removed in response to said satellite identifier and said TOW value associated therewith.

17. The system of claim 11, wherein said processing system comprises a hub, and the system further comprises:

a position location server for receiving said combined packet stream.

18. The system of claim 17, wherein said position location server comprises:

a processor for decoding satellite navigation data within said combined packet stream to generate satellite data, and

a memory for storing said satellite data.

19. The system of claim 17, further comprising:

an additional reference station disposed proximate to said position location server for providing at least one additional packetized satellite navigation data stream;

wherein said position location server comprises:

a processor for removing duplicate packets within said combined packet stream and said at least one additional packetized satellite navigation data stream to generate another combined packet stream and decoding satellite navigation data within said other combined packet stream to generate satellite data; and

a memory for storing said satellite data.

20. An apparatus for distributing satellite navigation data, comprising:

means for processing satellite signals at each of a plurality of reference stations to receive a respective plurality of satellite navigation data streams;

means for forming packets in response to said plurality of satellite navigation data streams to generate a plurality of packetized satellite navigation data streams;

means for sending each of said plurality of packetized satellite navigation data streams to a processing system;

means for removing, at said processing system, duplicate packets within said plurality of packetized satellite navigation data streams to generate a combined packet stream; and

means for sending said combined packet stream into a communication network.